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To:
Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Unlicensed Use of the 6 GHz Band, ET Docket No. 18-295; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz, GN Docket No. 17-183: Notice of *Ex Parte* Presentation

Dear Ms. Dortch:

On September 5, 2019, Coy Trosclair of Southern Company Services, Inc., Michael Rosenthal and Kasey Chow of Southern Communications Services, Inc. d/b/a Southern Linc ("Southern Linc"), Alan McIntyre of Southern Linc (by phone), Allen Bell of Georgia Power Company, and J. Wells Ellenberg of Southern Company (collectively, "Southern"), along with David Rines, outside counsel to Southern, met with Julius Knapp, Ira Keltz, Aspasia Paroutsas, Jamison Prime, Michael Ha, Karen Rackley, Nicholas Oros, Bahman Badipour, Barbara Pavon, and Hugh Van Tuyl of the Office of Engineering and Technology ("OET"). During this meeting, we discussed the Commission's proposals for allowing unlicensed operations in the 6 GHz band.¹

Southern stated that it understands and appreciates the need for additional spectrum to be made available for unlicensed use to support WiFi and other broadband-enabling technologies. Southern emphasized, however, the vital importance of sufficiently protecting incumbent licensed operations in the 6 GHz band, including those which are critical to ensuring the reliability and resilience of our Nation's energy infrastructure. Southern accordingly urged that the Commission should, at a minimum, require rigorous field-testing of any Automated Frequency Coordination ("AFC") systems that may be proposed as a prerequisite to finalizing its rules for the 6 GHz band in order to ensure that the AFC system will work as planned. If field-testing reveals any problems with protecting licensed incumbent operations, the Commission should not move ahead with opening the band.

Southern discussed how utilities currently use the 6 GHz band for mission-critical wireless communications to support the safe and reliable delivery of electricity to homes and businesses all over the country, including the following:

Real-time monitoring of high and medium voltage transmission lines;

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¹/ Unlicensed Use of the 6 GHz Band; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz, ET Docket No. 18-295, GN Docket No. 17-183, Notice of Proposed Rulemaking, 33 FCC Rcd 10496 (2018) ("NPRM"); See also Comments of Southern Company Services, Inc., ET Docket No. 18-295, GN Docket No. 17-183 (filed Feb. 15, 2019); Reply Comments of Southern Company Services, Inc., ET Docket No. 18-295, GN Docket No. 17-183 (filed March 18, 2019).

- Supervisory Control and Data Acquisition ("SCADA"), a critical situational awareness tool for the operation of electric grids and other critical infrastructure;
- Teleprotection, essential for selectively isolating faults on transmission lines, transformers, reactors and other important items of electrical plants;
- Voice communications, essential for service restoration/storm response; and
- Backhaul for critical data and voice communications.

Southern explained that the 6 GHz band is uniquely suited for utility mission-critical communications over long paths where there is a lack of reasonable alternatives. Because of Southern's extensive service area, and the need to communicate with facilities in very rural areas, the 6 GHz band is the only band that can accommodate Southern's bandwidth and performance requirements, and deploying fiber along these routes is not economically feasible.

In the case of utility communications systems, interference is life threatening. The public relies on the availability of safe and reliable electric power, and disruption to the communications links supporting utility applications such as those described above can have serious consequences to utility operations and create dangerous situations. The potential hazard of interference to mission-critical communications in the 6 GHz band was illustrated by recent FCC enforcement actions against users of unlicensed U-NII devices who interfered with FAA weather radar systems.² Although the FCC's rules for the U-NII band are designed to prevent such interference, in each of these cases the unlicensed user "apparently misconfigured the devices by turning off a required feature that would have prevented the devices from causing interference" to an FAA weather radar station.³ The Commission must ensure that any rules it may adopt to allow unlicensed use of the 6 GHz band include sufficient protections to prevent "misconfigured" devices from causing interference to licensed 6 GHz operations.

First, the Commission should require AFC for all unlicensed devices in the 6 GHz band, including low power devices. In addition, the Commission should require more frequent "check-in" of AFC devices – *i.e.*, a

² / CA Solutions, Inc. (d/b/a Boom Solutions), Caguas, Puerto Rico; Boom Net, LLC (d/b/a Boom Solutions), Caguas, Puerto Rico, File No.: EB-FIELDSCR-18-00028272, Notice of Apparent Liability for Forfeiture and Order, DA 19-801 (rel. Aug. 22, 2019); Broadband Telecommunications Network, Corp. (d/b/a Integra Wireless), San Juan, Puerto Rico, EB-FIELDSCR-18-00027343, Notice of Apparent Liability for Forfeiture and Order, DA 19-802 (rel. Aug. 22, 2019); WinPR, Inc., San Juan, Puerto Rico, File No. EB-FIELDSCR-18-00027969, Notice of Apparent Liability for Forfeiture and Order, DA 19-803 (rel. Aug. 22, 2019); See also "FCC Enforcement Advisory: Enforcement Bureau Takes Actions to Counter Interference to FAA Terminal Doppler Weather Radar Station," Public Notice, Enforcement Advisory No. 2019-06, DA 19-807 (rel. Aug. 22, 2019).

³ / "FCC Takes Action Against Companies that Interfered with FAA Weather Radar in Puerto Rico: Agency Proposes Fines & Issues Enforcement Advisory to Warn Wireless Internet Service Providers," FCC News Release (rel. Aug. 22, 2019).

device would be required to "check-in" and register every 24 hours, and any device that fails to do so would be incapable of operating in the band unless and until it registers through the AFC system.

Finally, Southern briefly addressed the various technical studies and reports that have been filed in the docket over the past few months. Southern stated that it is still reviewing the specifics of each of these studies and will follow up with OET with any specific comments or concerns. In the meantime, however, Southern observed that the contradictory conclusions reached in each of these studies – even when purportedly analyzing the same data – underscore the need for actual and rigorous field-testing before any rules for unlicensed use of the 6 GHz band are finalized.

In accordance with Section 1.1206 of the Commission's rules, this letter is being filed electronically in the above-referenced proceeding.

Sincerely,

Coy Trosclair

Director of Telecom Services

cc: Julius Knapp

Ira Keltz

Aspasia Paroutsas

Jamison Prime

Michael Ha

Karen Rackley

Nicholas Oros

Bahman Badipour

Barbara Pavon

Hugh Van Tuyl